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Young People's Attitudes towards and Evaluations of Mobile TV

Actitudes y valoraciones de los jóvenes ante la TV móvil

ABSTRACT

Mobile communication systems are responsible for the significant changes that are taking place in cultural practices. The mobile phone has established itself as a portable, multi-use, interactive device that individuals use to enable them to manage important aspects of their work and leisure time. This article is based on research that aims to understand the phenomenon of mobile TV, the related trends (in terms of experiences, ideas, and models), and the type of user that operates this device. This article also analyses the values and perceptions of users as well as the benefits and drawbacks they encounter when using mobile TV. The study develops a mobile TV content test by using a viewing experience among 100 students from the universities of Malaga and Seville, in Spain. Structured questionnaires with closed questions are used with qualitative techniques that promote virtual discussion in forums that focuses on face-to-face groups. Altogether, the study has enabled the development of a theoretical model of the phenomenon of mobile TV, and has classified user preferences in terms of ergonomic technology, delivery dynamics, the economic value of services, and consumption patterns and scenarios. The main results focus on participants' evaluations of mobile media narrative and the cross-platform experience.

RESUMEN

Una porción significativa de los cambios que en la actualidad experimentan las prácticas culturales puede encontrarse en el ecosistema de las comunicaciones móviles. En este sentido, el teléfono móvil comienza a postularse como el dispositivo multiuso, portable e interactivo que los individuos utilizan en su quehacer cotidiano, ofreciéndoles la posibilidad de gestionar importantes parcelas de su tiempo productivo y de ocio. La investigación en la que descansa este artículo tiene como objetivo comprender el fenómeno de la TV móvil, qué tendencias sigue –experiencias, reflexiones, modelos–, y qué tipo de usuario se sirve de ellas; así como sus percepciones, valoraciones, ventajas e inconvenientes que encuentran. El diseño metodológico ha contemplado el testeo de la experiencia de visionar contenidos de televisión móvil en un grupo de 100 estudiantes de las Universidades de Málaga y Sevilla mediante cuestionarios estructurados de preguntas cerradas y técnicas cualitativas que comprendían foros de discusión virtuales y grupos focales presenciales. En su conjunto, el estudio ha permitido elaborar un modelo teórico sobre la televisión móvil, pero también una tipología de uso relativa a las preferencias del usuario en cuanto a la ergonomía tecnológica, dinámica de distribución, valor económico del servicio, y patrones y escenarios de consumo. Los resultados más relevantes se centran en las valoraciones que los participantes formulan sobre narrativa propia para el medio móvil y la experiencia multiplataforma.

KEYWORDS / PALABRAS CLAVE

Mobile TV, cultural practices, digital contents, youth, imaginative appropriation, streaming, communicative scenarios.
TV Móvil, prácticas culturales, contenidos digitales, jóvenes, apropiaciones imaginativas, streaming.

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1. Introduction

For more than half a century, «watching TV» has been a widespread common cultural practice that is deeply embedded and supported in certain modes of use, business models and narrative discourses, in a continuous flow of messages available to all citizens. However TV, like the majority of the cultural industries today, has undergone far-reaching transformations, and it is within these changes in the general cultural, economic, technological and social framework that our society exists.

Any explanation of the changes in communication necessarily includes the remarkable progression of competences – the know-how acquired by the population that now not only knows how to use the technology, to receive and interpret content, but also knows how to use it to express itself and produce messages. In this sense, «watching TV» no longer means the synchronous reception of imposed content organized within a media format (the television screen) but, by using media, the user can now receive different content according to preference.

These changes in cultural practices are already recognized and described by the viewers, and this knowledge enables certain industries to address these changes –or at least use that knowledge to plan strategies. In particular, technology companies look to create devices that encompass[1] as many technical functions as possible so that new devices can be used statically or as a mobile part of daily life.

In this context of mobility, permanent connectivity and ubiquitous communication, the outstanding device is the mobile telephone, which has been transformed into a multipurpose tool. It acts as a small computer that helps us to manage our spare time and business activities within any time-space context; it is also a crucial element in many of our social interactions, communications and cultural practices. The mobile phone integrates numerous functions, including providing communication links through sounds and images, and allows almost universal diffusion; indeed, this so-called «fourth screen» (after cinema, television and the computer) is seen as the screen of the future (Cebrián, 2009). Unsurprisingly the number of scientific studies that examine the use of this technology by adolescents (Garcia-Galera & Monferrer, 2009) and its impacts on daily life (Malo, 2006) is on the increase.

These changes in cultural practices, technology, content, production, delivery and usage dynamics are complex in nature and origin, but they all demonstrate a constant process of innovation. The participation of technology companies, cultural industries –including traditional companies that seek to adapt, as well as the most recently developed industries that offer brand new contents, services and business models– and users (indeed, all of us) draws on creative processes of innovation, using technology and symbolic practices in the contexts of our daily lives.

To rigorously examine this communication scenario in which innovation is crucial, the Advanced Media Content Research Group has developed the Innovcom programme to understand specific cultural practices within the population (particularly how and why users are guided by media and content. In doing so, the group aims to propose criteria that can guide both the media content industry as well as public policy makers. One of the Innovcom programme's research interests is media content for mobile devices[2]. To study the mobile phone, we have adopted several approaches and undertaken various research activities. One of our main goals in this investigation was to understand how the user perceives these devices and to assess their main users, namely young people, as the ones most likely to experience that media. Despite a lack of precedent[3] in previous research we have developed several studies, some of the results of which we present in this paper.

2. Methodological design

Our main objective was to evaluate the experience of consuming television on a mobile device by a group of young people (i.e., students at two universities in Andalusia, Spain). We designed an experience in which 100 mobile phones were given to a specific group of students; the group was asked what they thought of the experience with respect to their lives and their style of communication. The terminal model used was the Sony Ericsson 910i, which allowed navigation on the Internet through 3G data networks, particularly through Vodafone's multimedia content management and delivery site, Vodafone Live!

We stratified the sample of 100 individuals into four sub-groups.

- 25 students (male and female) from the 3rd year of the Media Studies Bachelor Degree course at the University of Malaga
- 25 students (male and female) from the 3rd year of the Media Studies Bachelor Degree course at the University of Sevilla
- 25 students (male and female) from the 3rd year of the Telecommunications Engineering course at the University of Malaga
- 25 students (male and female) from the 3rd year

of the Telecommunications Engineering course at the University of Seville.

These groups allowed us to maintain a balance in geographic distribution as it affected mobile TV use. The experience lasted a month, with four broadcasts at the rate of one per week.

The design consisted of the following phases.

• Initial questionnaire. The students from the four courses selected were given a «questionnaire on media leisure» (32 questions with closed answers: simple or multiple choice) in order to investigate cultural practices. Using this procedure, 257 surveys were carried out, of which 158 were selected (78 from the Media Studies courses, and 80 from the Telecommunications Engineering courses).

• Contextual analysis: This focused on the sample's cultural practices. The 158 questionnaires were processed by the Statistical Package for the Social Sciences software (SPSS) in order to evaluate trends in media consumption. This allowed us to frame the study on mobile TV experiences within the context of cultural practices.

• Selection and preparation of the participants. From the 158 questionnaires, 100 students were selected (25 from each sub-group) who showed the highest level of integration into digital culture. As an incentive to participate in the experience, they were gifted the device they would use to carry out the experience. Later, they were asked to attend a preparatory session which had the following objectives:

• To instruct the participants on the investigation, to obtain agreement to participate in the experience by watching content for a minimum stipulated period, to assess the participants' content according to the given evaluation criteria, and have them sign a contract that agreed to these obligations.

• Preparing for broadcasting. The research group's associated producer designed the media content of a fictional series, each programme of which was 10 minutes in duration. The clips would be broadcasted through Vodafone Life!'s channel each Thursday. Simultaneously, a promotional campaign in various social networks would be implemented to promote a contest in which people not involved in the experience could participate by producing content and win a cash prize for the week's best proposal. This included the following initiatives:

• Creation of a virtual interaction site (i.e., participation forums). A platform within the virtual campus of the University of Malaga was created, and its discussion forums allowed students to detail their experiences in handling the mobile TV as well as evaluating the material watched.

• Development of the experience. Broadcasts of the content and evaluation of the participants in the forums were mediated by members of the investigating team.

• Thematic analysis of the commentaries would occur in the forums, for instance, through evaluations of the experience of watching the content on the mobile TV.

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• Focus groups with some participants were used to evaluate a time experience using the mobile TV. In this phase, four groups of eight students that included one participant from each of the sub-groups took part in a guided discussion for one hour.

3. Qualitative research results

3.1. Semantic analysis of discussion forums

As part of the methodological strategy, we developed a virtual space which the participants could access daily to input their opinions, to discuss their experiences and answer any questions that were formulated by the research team. The material compiled in these forums was semantically analyzed after identifying the topics most often highlighted by the participants. Next, a synthesis was made of the comments arising in the forums. These conversations enabled us to identify four thematic sections.

3.1.1. Evaluation of technical aspects

The participants stated that image quality was good in general terms. Broadcast streaming quality was better or worse depending on the 3G signal strength.

They indicated that quality is not comparable to other screens, such as a computer screen, for instance. Another participant raised a valid point by noting that «when viewing the final credits of a video, I've noticed that the mobile phone is not totally adapted to play subtitled content, which is something that requires additional technological improvements». A few participants thought the quality was «very poor» but overall, one of the best-rated aspects was the quality of streaming.

Many participants classified the video streaming speed as acceptable and noted minimal loss of signal. One referred to the change in format used to improve quality by noting that «evidently, videos with more quality can be uploaded with 3gp [format], which it is currently using. In mp4 [format], it would be seen better [i.e., the viewing quality would be greater]». Another participant indicated the difficulties arising from the inadequate connection speed, pointing out that the «video's navigation and visualization on this mobile telephone have all the pros and cons that we expected.

The main advantage is the possibility of having Internet connection wherever you are. However, you need the 3G network, or the navigator will go slowly, and many pages will not be loaded».

Regarding sound quality, the participants' opinions were positive; listening was easy in areas with little background noise. When, in a scene from an episode, two or more sounds came together (voice of actor + music), several participants perceived audio distortion, but there was a significant improvement when earphones were used.

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3.1.2. Evaluation of narrative aspects

The idea of a collaborative series was well received by the majority of participants. One of them indicated at the end of the first video that «the series per se seems to me to be original. In addition, the possibility that Internet users can follow the series seems interesting to me, [particularly] by encouraging the participation of the public. This is perhaps the first 'wiki series' to be produced in Spain through the Internet». Almost all participants rated positively the fact that the video left the door open for the continuation of the series, as well as its humorous tone. One of the participants also stated at the beginning of the series that «I hope that the following episodes keep up this humorous tone because it is nice to watch a short video in your free time on a mobile phone, that makes you smile».

Regarding genre preferences, participants cited the news, sitcoms, sports, mini-series and videos, with the emphasis on short clip content. One commented that «I am happy to use my mobile phone to watch short-length media. I am satisfied that these video clips can keep me [entertained] for a short while. It has to be quality entertainment. Using the telephone to watch TV on the bus does not mean that producers can create content that insults the viewer's intelligence. I know that this is not going to be like that, and mobile TV will be focused on creating clones of conventional television networks».

In general terms, the average duration of the broadcast (two to three minutes) was welcomed by the participants. The majority thought a five-minute broadcast was the limit. One participant said that this short «duration is brilliant, as we are not accustomed to spending a long time with a fixed glance on such a small screen like that of a mobile phone».

3.1.3. Evaluation of the experience

The majority of participants engaged in the experience from an individual perspective and reasoned that technical limitations (i.e., the size of screen and volume) made a collective assessment difficult. In this respect, one participant indicated that «I believe that many people could not watch it without

being uncomfortable». Even so, the majority reported having at some point shared mobile TVs with acquaintances (i.e., partners, family, or friends) for the purpose of discussing the videos or to show off their new device; some even shared earphones while viewing. Regarding the time and place of viewing, almost all indicated that they watched videos in their spare time or while waiting. The most common viewing places were the bedroom, in bed before sleeping (i.e., «I watch it when people are asleep»), on public transport or between classes. A frequent comment in the forums referred to the portability of the media and the fact that it allows ubiquitous media consumption that previously required seating in front of a screen. They also indicated that they have begun to see the mobile phone as a multimedia consumption device; for instance, «it seems to me that the experience is very good, considering that in the end what we will have will not be mobile phones, but minicomputers». Others emphasized their use as an alternative screen, saying «recently I was delayed on my journey home and I missed the beginning of a football match; if I had taken the mobile phone with me, I would have seen it from the beginning on my way home».

Many participants found the experience complicated, although they expressed expectations that improvements would probably be available soon. Almost unanimously, participants agreed that watching mobile TV demands a high level of concentration. Even so, some admitted to enjoying the experience while eating, listening to music or chatting on MSN Messenger on another screen. As one participant pointed out, «if it is the Champions League, I simultaneously watch a game on the mobile phone and another on the normal TV».

Another interesting example of complementary activity was exhibited by a participant who stated that she could watch a mobile broadcast «during the advertising breaks of [another] series». Some even argue that the viewer usually excludes other activities because when money has been spent on content, attention concentrates exclusively on that content, unlike that of a free service (television or radio) that can be watched while other tasks are carried out. They also point out that the viewing experience of televised content on a mobile phone is not as good as that of the cinema, television, or computer screens.

3.1.4. Evaluation of payment for mobile TV services

The participants stated that they were reluctant to pay for mobile TV. The majority declared they would not pay for mobile TV content, perhaps because they had other resources; for instance, one participant said: «I know for certain that I would not pay for televised content on a mobile phone. Rather than watch something on a mobile phone and pay a connection fee for the mobile Internet, I would prefer to buy a laptop DVB USB-card that costs about 20€, and I could watch TV in real time. And a series or a film could be downloaded to my PC at home, and I could see it later on the laptop, which has far better [viewing quality]». Another participant referred to Wi-fi connectivity and the distribution of content through the network by saying that «the latest generations of mobile phones have Wi-fi connectivity, and all of the media videos, whether short clips or with other content, can be seen free of charge using the net-work». A third participant explained a different route for obtaining content: «At the moment, almost all of us have a mobile phone with a memory card in which we can store videos or music. Or, the mobile phone can be synced with the PC through Bluetooth or a USB cable, and this allows us to store on the mobile phone all the content we have in our PC or all that we can get through it. Therefore, we could download any video from the Internet through a PC and later sync it to the mobile phone and watch it there. Of course, it is much cheaper to do it this way». The general opinion is summarized in this quote: «The future problem for mobile TV is having to pay for content that we get free and in better quality in our living rooms».

However, they accepted as reasonable a flat rate at a reduced cost (i.e., 5-10 € monthly) that included access to all video content through a mobile phone. In this case, they would require mobile TV technology to develop the capacity to receive the DVB, thus excluding the mobile network operator from the business model.

3.2. Qualitative analysis of the experience of mobile TV. (Focus groups)

The qualitative analysis of the study consisted of forming four focus groups, with 8 participants each, from the pre-established groups. A discussion was held a few days after the conclusion of the mobile TV experience, first in Malaga on December 10th, 2009 and then in Sevilla on December 16th, 2009.

3.2.1. A new scenario

For all participants, the experience with the mobile TV created «disengagement» between the daily reality of the use of the mobile device and the «ideal world» which they could immediately access by

means of the experience. They saw this phenomenon as a new experience or a new scenario in which they did not have to worry about the cost nor the time spent watching mobile TV content, implying that this experience was different from ones normally accessed through a mobile device. In essence, these university students were given a «cash vacation» that allowed them to engage in a technological world of content that they had only been able to access before in a very limited way. According to one participant, «it was as if they gave you a free room in the best hotel in the world when you were used to living in your house. Clearly, you knew that it was only for a little while but…». This is important because all the participants identified previous experiences with mobile TV prior to the initiation of this experience. This experience offered participants a place in which to put into play their identities as ideal users of a device with unlimited benefits. They no longer had a telephone but something much more versatile; as one participant noted, «Now, indeed, you understand that we had another thing that was beyond telephone». The reaction to the device and content and their advantages and disadvantages were defined by the way each participant perceived his presence within the experience:

• For some people, it continued as it began, as a fictional scenario into which they rarely entered. They always considered it to be an unreal experience, from which they would wake up at some point to return «to harsh reality». From the beginning, these people developed a certain intolerance of the experience and the device.

• Other participants «entered» more fully in the role defined by the experience, adopting as their own the ideal world that appeared before them. It is not that they were unaware of the fictional nature of the experience; rather they opened up their habits and personality to the experience. As such, this again raises the issue of lapsing consciousness regarding the end of the experiment, which imposed certain types of relationships (attitudes) towards the mobile phones, positive or negative (resistant).

3.2.2. Differences in conceptualization: male-female

In our study, there were people for whom the technology was an open but fragmented window to specific points of interest, and for others it was a meeting point or relationship facilitator that allowed exchanges of emotions and ideas with other people. This difference was associated to gender; women understood the new technological device in terms of relationships, whereas men saw it more as an instrument for information, with more episodic and fragmentary connections between users. Indeed, men showed a general tendency to believe that they had an instrument at their disposal to access content and forums where they could successfully obtain or exchange information on specific interests. Additionally, they regarded the terminal as a technological extension of the benefits they could have accessed through other devices, such as a TV, computer or iPod.

By contrast, the women tended to see the device and the experience as an opportunity to maintain real and virtual relationships, either by traditional calls or through communication on online social networks. However, this difference does not mean that the central idea of the demand to be connected disappears for some participants. All participants stipulated that being connected was a necessity, without which (as one of them put it) «I cannot imagine my life». The difference is in the ways that being connected was experienced by users. For men, being connected meant «to be connected in», while for women, it meant «to be connected with». Men access, while women live. Men related in a «receptive» way, and women related in a «projective» way. However, this association with respect to gender is a guideline rather than a steadfast rule. In conclusion, t women entered the multimedia experience without letting go of who they are; they used the device to re-establish their identity. Men, in contrast, interacted with the device more like spectators and did not access the contents they called up; however, they did download them for their use.

3.2.3. Different perceptions from the multiplatform

We have also stated that students with a range of audio-visual consumption habits signify a clear preference for a particular support or device. Thus, especially for students who use one type of technology in receptive terms, TV is watched on large screens (i.e., the TV or PC), music is listened to in stereo, Hi-fi sound systems or on iPod, while chat and forum participation occurs through the PC. These people are more reluctant to accept multi-use platforms, insofar as these platforms demand the extra effort of having to make discussion in a forum or chat using the uncomfortable keyboard of a mobile phone. This compartmentalization of the communication experiences relates to the association of each support to a time-space portion of daily life by the participants in the study:

• Widely accessed media content –such as sport

or cinema– are supported by devices such as the TV or computer. They do not take up any personal time, and anything can be chosen or negotiated depending on the company.

• The musical or radio content, mini-games or urgent messages via SMS or MMS usually occupy the «down time» that occurs while commuting from home to university or to a leisure activity.

• Relational activities occupy these moments of leisure and are ubiquitous, although such activities preferably occur in the privacy of one's home, during leisure moments at the university or in meetings. They take place in times of privacy and so-called «oriented leisure time» in which virtual and/or real relations fill personal free time. Despite having focus groups in different cities and with students of different degrees, we found no significant differences that justify a particular usage setting among them. This is something worthy of further attention, considering the «presumption of superiority» in the technological competence of the telecommunications engineering students.

3.2.4. Perceptions of TV and Internet connectivity in a mobile phone device

Participants' perceptions of having TV and Internet connectivity in a mobile phone device are central to our study. For that reason, the original design of the experience aimed to channel the main evaluations of the participants towards this function. In addition, this issue was discussed in the focus groups and was debated at length. The answers can also be understood as a «marketing study» with respect to the use (particularly regarding allowances), limitations and possibilities of multi-functions in a mobile phone device.

• The screen. Although the general evaluation of the experience was described by many as «enthusiastic», when they reflected on the specific points of the experience, the answers were more critical. Namely, the vast majority of participants agreed that the type of terminal used was not suitable for the content to be viewed because of the size of the screen.

• The «false-live broadcasting». The participants had access to Digital TV Mobile from Vodafone. There was some criticism regarding the selection menu for its general nature. As one participant said, «it is not really the telly. Some things are deferred, and others are a series of episodes that can be repeated again and again». Another participant said «watching TV is not the main purpose of the mobile phone. Currently you can see certain TV content adapted to the mobile phone».

It seems that there is a difference between expectations (i.e., to watch TV through the device) and reality, which participants describe as repetitive, delayed and insufficient. This criticism is in contrast to the enthusiasm of participating in an experience in mobile TV, which perhaps results in a certain level of disappointment, as the quality of traditional TV is not reproduced on the mobile terminal.

• Internet connectivity. In part because the series was being tested during the experience and did not work as expected, the participants transferred their attention to the issue of being connected. Suddenly, being connected was the essential function of the mobile phone and the benefits of connection to the Internet –with free, although limited access– became the main attraction, indeed «the star of the

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experience». Some indicated frustration at the technical limitations of the connection; certain web sites had not adapted their content to a mobile format, and some of the visual Java applications were not supported by the terminal. This limited access, for instance, to the forums that were the essential meeting place for participants with a receptive-informative profile.

• The leisure content. The leisure content was the strongest feature of limitless connection. The most popular web pages browsed were those that allowed the exchange of curious ideas, audio-visual references to shows, videos or content, and fast searches. These involved not only reception and exchange but were also necessary for taking advantage of the downloadable audio and video content authorized by the Vodafone Store. Limitless connection was highly rated as far as content was concerned.

4. Discussion

The focus of our research on mobile TV functionality rested on a particular methodological idea. Specifically, we elaborated a theoretical model on the phenomenon of designed content based on that theoretical model, and tried to represent a model user of the product under investigation by surveying the experiences and opinions of users regarding the device and content.

This approach, in our opinion, was an effective way of establishing certain narrative patterns and formalizing content characteristics regarding a mobile format. With regard to formal characteristics, we can initially conclude that important differences in the reception of televised messages on a mobile telephone depend on diverse conditions that can be explained in terms of ergonomics (i.e., screen size), time (i.e., content duration compared to the time available to viewers) and context (i.e., 'liquid' scenarios in which users are available when messages are received); these issues require adjustments in content production and screenwriting.

Other important conclusions are the necessity to adjust content according to specific lifestyles that include cultural practices. The need to produce and deliver these contents and resources within the framework of the current cultural industry in a way that reduces economic risk and achieves a certain degree of success is also important. Nevertheless, the application of these resources requires adaptation to the specific demands of the media (for instance, targeted advertising and marketing campaigns).

Regarding this experience of mobile TV, the participants are conscious that mobile TV does not directly correlate to the consumption of content from other screens, such as TV or cinema. This creates a sensation of value deficiency in the user. In addition, participants greatly appreciated the ability to access the Internet. It is important to note that the consumption of mobile TV content is not widespread, whereas participation in social networks and communication through e-mail and chat rooms is.

Participants' greatest concern is the cost that access to this ubiquitous universe requires; they recommend a flat rate at reduced cost as a form of payment for data and voice plans.

Notes

[1] The convergence of support (mainly personal computers [PC] and mobile phones [MP]), industries and usages before unfolded separately.

[2] The project discussed is in the 'Supports' section.

[3] The three previous experiences most similar to ours were carried out by the VTT Technical Research Centre of Finland. In its report entitled «FinPilot 2 end Report – User Acceptance of Mobile TV Services» (Kaasinen, Kivinen, Kulju, Lindroos, Oksman and Kronlund: 2008), they employed a panel of 27 users from Helsinki who used several mobile TV services via the Nokia N77 product from July 2007 to February 2008. Complementing services that were already available commercially, 10 pilot services were tested in this study. Feedback from users was gathered through surveys and interviews on the Internet.

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